



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/050,313	01/16/2002	Toomas Wigell	032986-021	8716

27045 7590 08/11/2004

ERICSSON INC.  
6300 LEGACY DRIVE  
M/S EVR C11  
PLANO, TX 75024

EXAMINER
----------

PHAN, HUY Q

ART UNIT	PAPER NUMBER
----------	--------------

2685

DATE MAILED: 08/11/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/050,313

Applicant(s)

WIGELL ET AL.

Examiner

Huy Q Phan

Art Unit

2685

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-12 is/are allowed.
- 6) ☒ Claim(s) 13 is/are rejected.
- 7) ☒ Claim(s) 1,11 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Specification***

1. The abstract of the disclosure is objected to because the term "ARQ" is not defined.

Correction is required. See MPEP § 608.01(b).

Applicant is reminded of the proper language and format for an abstract of the disclosure. The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

### ***Claim Objections***

1. Claims 1, 11 and 13 are objected to because of the following informalities: the term "ARQ" is not defined.

The examiner suggests editing the first occurrence of the term "ARQ", in each of the independent claims, with language such as - - Automatic Repetition Request - - to maintain consistency with the specification.

Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jorgensen (US-2002/0099854).

Regarding claim 13, Jorgensen disclose a base station (fig. 3B, feature 320) for use in a mobile telecommunications system, comprising means for implementing an ARQ mechanism to facilitate reliable transmission of RLC PDUs [448] between the UE (fig. 3B, feature 294d) and the GW (288b), the ARQ mechanism utilizing ARQ status messages sent over the air interface, between the UE and at least one of other BS, in order to acknowledge successfully transmitted data packets and request retransmission of unsuccessfully transmitted data packets ([557]-[558]).

But, Jorgensen fails to expressly teach means for buffering RLC PDUs received from at least one of a GW and a UE. However in analogous art, Haeggstrom teaches means for buffering RLC PDUs received from at least one of a GW and a UE (col. 5,

Art Unit: 2685

lines 23-45). Since, Jorgensen and Haeggstrom are related to system for control the data transmission; therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Jorgensen by specifically buffering RLC PDUs received from at least one of a GW and a UE as taught by Haeggstrom for purpose of storing and transferring advantageously data at desired rate in order to transmit the data more efficiently.

Both, Jorgensen and Haeggstrom do not particularly disclose the base station for use in a UMTS Terrestrial Radio Access Network (UTRAN). However, the examiner takes official notice that the UMTS Terrestrial Radio Access Network (UTRAN) is extremely well known in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the system of Jorgensen and Haeggstrom by specifically having the base station for use in a UMTS Terrestrial Radio Access Network (UTRAN) for purpose of allowing the base station of capability to perform its function in any wireless communication systems.

### ***Reasons for Allowance***

1. Claims 1-12 are allowed.

The following is a statement of reason for the indication of allowance: the prior art made of record and considered pertinent to the applicant's disclosure does not disclose nor fairly suggest the method of at a Gateway (GW) of the UTRAN, segmenting RLC Service Data Units (SDUs) into RLC PDUs for transmission to at least one Base Station (BSs) of a set of BSs belonging to a handover link set, and combining RLC PDUs

Art Unit: 2685

received from the at least one BSs into RLC SDUs for transmission to a core network of the system.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

2. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a) Kalliokulju et al. (US-2002/0091860) disclose a method for packet network.
- b) Parkvall et al. (US-2002/0080719) disclose scheduling transmission of data.
- c) Besset-Bathias (US-6,711,126) disclose managing data packets.
- d) Scholefield et al. (US-5,752,193) disclose a method for control transmission of data packets.
- e) Mustajarvi et al. (US-6,661,782) disclose packet radio network.
- f) Forssell et al. (US-6,718,179) disclose a method for packet radio connection.

- g) Riihinen et al. (US-6,697,331) disclose a method for control transmission of data packets.
- h) Kalliokulju et al. (US-2003/0165161) disclose packet data transmission.
- i) Dubuc (US-6,603,739) disclose a method for message transmission.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy Q Phan whose telephone number is 703-305-9007. The examiner can normally be reached on 8AM-5PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Urban F Edward can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phan, Huy Q

AU: 2685

Date: Aug. 06, 2004

  
EDWARD F. URBAN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600